

STATEMENT UNDER ARTICLE 19 (1)

Claim 1 now recites that each of the clamps does not move with respect to the tube when said clamp is in the closed position. This feature is described throughout the specification, and is reflected in the drawings of the present application as originally filed.

As an example, as the flexible tubing 1 in Figure 1 moves generally moves right to left through the device illustrated in Figure 1, it passes by the gates 3-5. However, the operation of the gates is such that as they pinch a section of the flexible tubing, the two halves of the gate, such as those illustrated in Figure 10, move with the tubing. Thus, any of the pinched positions established along the flexible tubing remains at a fixed point on the tubing until the gate is released.

The Written Opinion of the International Searching Authority cites the POWELL reference, noting that the POWELL device comprises tubes (9) for containing culture medium and clamping means (115) for dividing the tubes into discrete sections. However, the elements 115 are identified by the POWELL reference as pump rollers. As noted in column 5, lines 62-63, rotation of the pump will cause fluid to be displaced through the tube 119. Such fluid displacement takes place only if the pump rollers move with respect to the tube 119.

Of the newly added claims, claims 18 and 30 are independent. Claim 18 recites a device incorporating flexible tubing and a system of clamps. The system of clamps is designed such that the tube is clamped at four points,

defining three regions. The system of clamps then operates in such a manner that, in a repeating pattern, the tubing is clamped upstream of the first point, the tubing is clamped at a point between the second and third points, and the second point is returned to the open position, thereby subdividing the second region into an upstream portion and a downstream portion, merging the first region and the upstream portion, and thereby defining new first through fourth points and first through third regions.

This operation is reflected in present Figures 3-9, which illustrate a series of states of the present invention during operation.

New independent method claim 30 recites a number of steps, including repeating a step that comprises clamping the tubing upstream of the first point, clamping the tubing at a point between the second and third points, and returning the second point to the open position, thereby subdividing the second region into an upstream portion and a downstream portion, merging the first region and the upstream portion, and thereby defining new first through fourth points and first through third regions.

The remaining new claims recite additional features of the present invention, including gas permeability/impermeability of the tubing, translucence or transparency of the tubing, controllability of pressure of the tubing contents, a pH indicator, a heating and cooling device,

an agitator, a device to allowed for controlled gas exchange, and a device to allow tilting of the tubing.